

tube and along substantially the length of the outermost tube over a range of operating conditions.

2. (unchanged) The gas delivery metering tube of claim 1 wherein the effective annular space has an effective diameter  $D_{\text{eff}}$  and the innermost tube has an inner diameter  $D_{\text{in}}$ , and  $D_{\text{eff}}$  and  $D_{\text{in}}$  are within a factor of three of each other.

3. (unchanged) The gas delivery metering tube of claim 2 wherein  $D_{\text{eff}}$  is approximately equal to  $D_{\text{in}}$ .

4. (unchanged) The gas delivery metering tube of claim 1 wherein a ratio of the surface area of the outermost tube to the total cross sectional area of the orifices formed in said outermost tube is equal to or greater than approximately 10.

5. (unchanged) The gas delivery metering tube of claim 4 wherein said ratio is greater than 100.

6. (unchanged) The gas delivery metering tube of claim 1 wherein said metering tube is used in a chemical vapor deposition system.

8. (unchanged) The gas delivery metering tube of claim 1 wherein the innermost tube has a length and a diameter and the ratio of the length to the diameter is in the range of approximately less than 70.

9. (unchanged) The gas delivery metering tube of claim 1 wherein the nested tubes are cylindrical.

10. (unchanged) The gas delivery metering tube of claim 1 wherein the nested tubes are rectangular.

11. (unchanged) In combination, the gas delivery metering tube of claim 1 and at least one injector assembly having at least one port for receiving said gas delivery metering tube.

12. (unchanged) In combination, the gas delivery metering tube of claim 1 and at least one shield assembly having at least one plenum for receiving said gas delivery metering tube.

13. (unchanged) The gas delivery metering tube of claim 1 wherein the innermost tube has the following properties:

$$L/D < 70$$

$$D/d \approx 10$$

$$NA_{\text{port}}/A_{\text{tube}} \approx 1$$

where  $L$  is the length and  $D$  is the diameter of the innermost tube,  $d$  is the diameter of one orifice in said array of orifices in said innermost tube,  $N$  is the number of orifices in the innermost tube,  $A_{\text{port}}$  is the cross sectional area of each of said orifices, and  $A_{\text{tube}}$  is the area of said innermost tube; and

the outermost tube has the following properties:

$D_{\text{eff}}$  and  $D_{\text{in}}$  are within a factor of three of each other

$\text{SurfaceArea}_{\text{outer}}/NA_{\text{outer}} \approx 10$  or more

where  $D_{\text{eff}}$  is the effective diameter of the effective annular space,  $\text{SurfaceArea}_{\text{outer}}$  is the surface area of the outermost tube,  $NA_{\text{outer}}$  is the total cross sectional area of all of the orifices in the outermost tube, and  $D_{\text{in}}$  is the inner diameter of the innermost tube.

14. (unchanged) The gas delivery metering tube of claim 13 wherein  $D_{\text{eff}}$  is approximately equal to  $D_{\text{in}}$ .

15. (unchanged) In combination, the gas delivery metering tube of claim 13 and at least one injector assembly having at least one port for receiving said gas delivery metering tube.

16. (unchanged) In combination, the gas delivery metering tube of claim 13 and at least one shield assembly having at least one plenum for receiving said gas delivery metering tube.